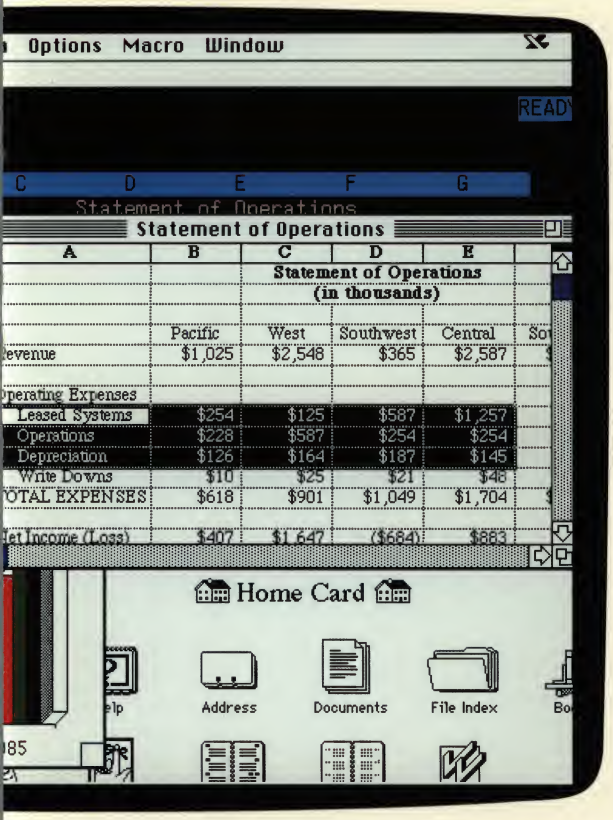

It shouldn't
matter how
a computer gets
information.

Information.

It comes in all shapes and sizes. And it can be found nearly everywhere you look.

Yet invariably, the information that's most needed is that which is least accessible.

Typically, it's distributed throughout the maze of mainframes, minicomputers, and file servers that your organization has acquired—systems in which it has a sizeable investment.



With a Macintosh, you can have multiple applications and documents open at the same time. To work with the one you need, simply click on its window and the application becomes active. In addition, much of the information you work with can be copied and pasted between applications.

People are expected to navigate this labyrinth of systems in order to find the information they need to make timely, accurate decisions.

A daunting challenge, to say the least.

So how do people go about getting whatever information they need, wherever it is—and whenever they want it?

More important, how can they view the information in a way that makes sense to them? In a way that can help accelerate the decision-making processes they face every day?

As it turns out, the answer to those questions can be a remarkably simple one: Start with Macintosh®

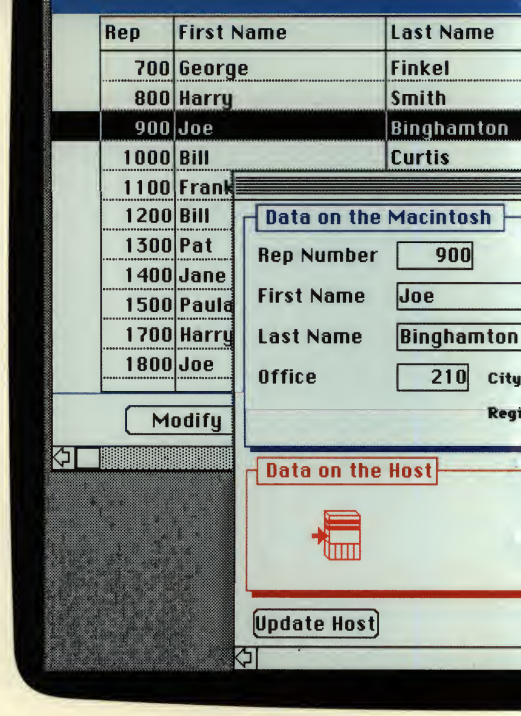
Because an Apple® Macintosh computer makes its power accessible to anyone who's willing to give it a try. And, when used in conjunction with the wide range of advanced applications available, it gives people the ability to do things they've never done before.

With Macintosh, people can concentrate on the task that needs to be done—whether it's drafting a memo, creating a presentation, or exchanging files over a network—instead of concentrating on the tool they're using to perform it.

Because Macintosh works the way people work.

It takes familiar, everyday items and applies them—in the form of on-screen icons—to personal computing. And it makes the computer's functions available through easy-to-use menus with terms that people can readily comprehend: open, copy, paste, print, save, quit, and so on.

As a result, many people have overwhelmingly accepted the way Macintosh enhances the experience of using a personal computer. Now they're extending their reach, looking to new sources for the information they need, and to existing sources for information in new forms.



Using programs available today, it's possible to create Information from the host can be displayed on the screen applications, including such features

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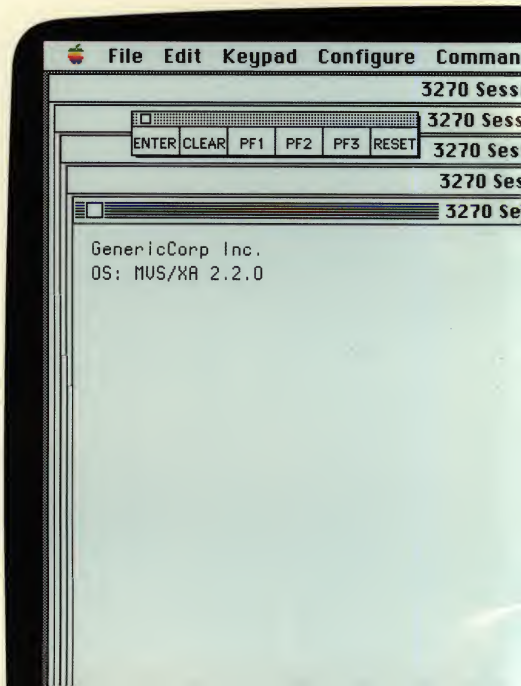
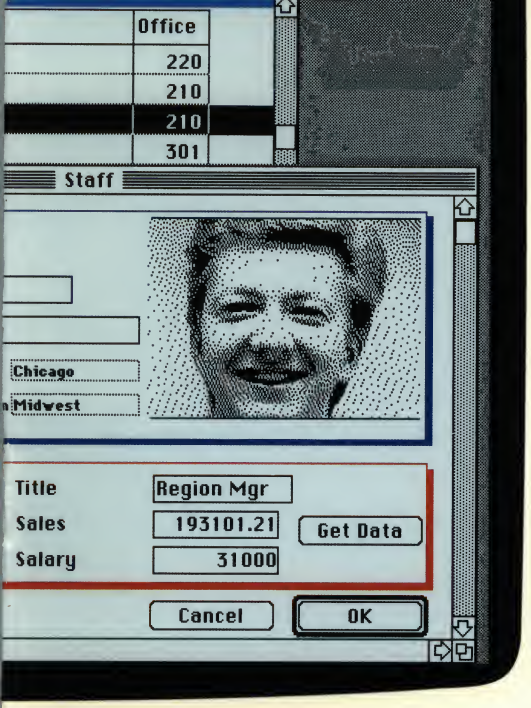
The networking and communications hardware and variety of ways. For example, a combination of products in a window on





custom applications that can access a host system. in a format that is consistent with traditional Macintosh as icons, scroll bars, and windows.

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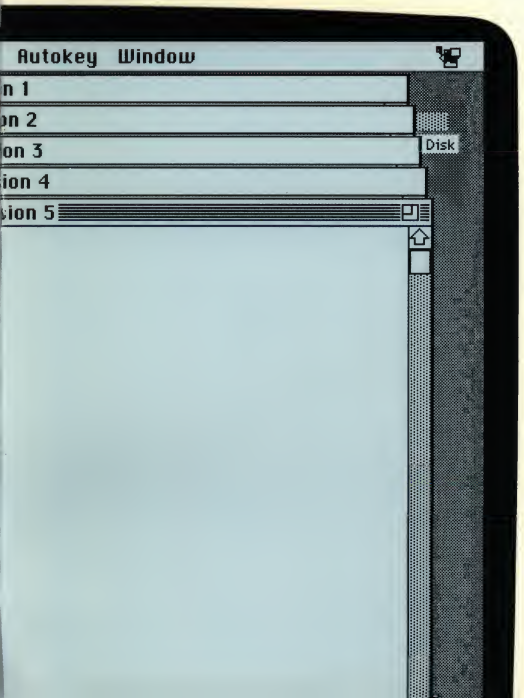
software described in this brochure can be used in a can emulate a terminal—running multiple host sessions— the Macintosh screen.



And they're looking to Macintosh for help. Because it enables them to view all of those sources of information in a familiar, consistent way.

One of Apple's original objectives for the Macintosh was to make the technical complexities of computing completely transparent. We believed that most people didn't want (or need) to know how information got from one place to another, or how a document was printed—just as long as it did.

As Macintosh extends its reach beyond the desktop into other computing environments—Digital, IBM, OSI, and TCP/IP—our commitment to insulating people from technical complexities is also being extended.

Which leads us to ask an intriguing question: What if the information you need—no matter where it is—could easily be reached from your Macintosh and integrated with the applications you use, in a manner that is consistent with the way Macintosh works?

Those are the goals of Apple's networking strategy:

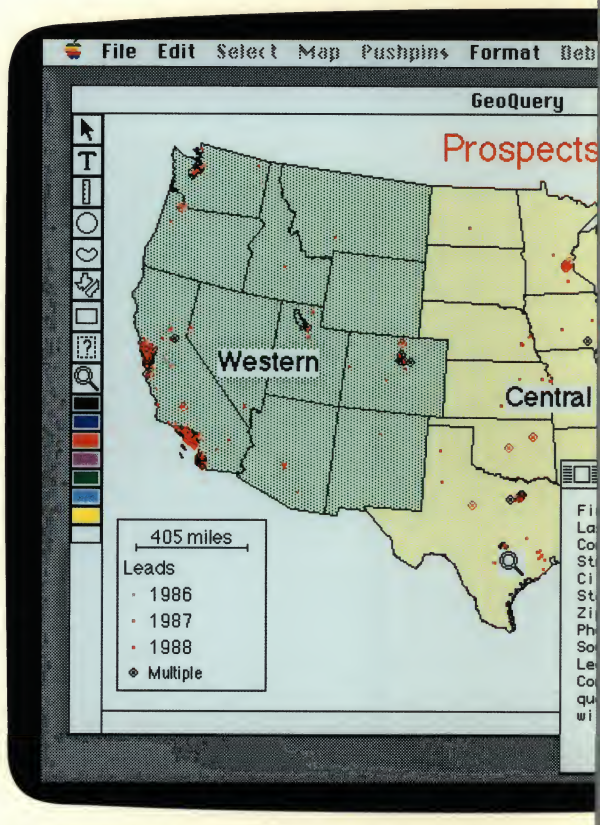
To make networking both simple and powerful, so people can access and use information more easily than ever before. And to make networking transparent to everyone on the network—whether they're down the hall, up the street, across the country, or on the other side of the world.

The networking and communications hardware and software products we describe in this brochure extend Macintosh computers into new areas, as well as allowing Macintosh to work in industry-standard and multivendor environments. This makes it possible to get information in ways you may already be familiar with—and in ways you never expected.

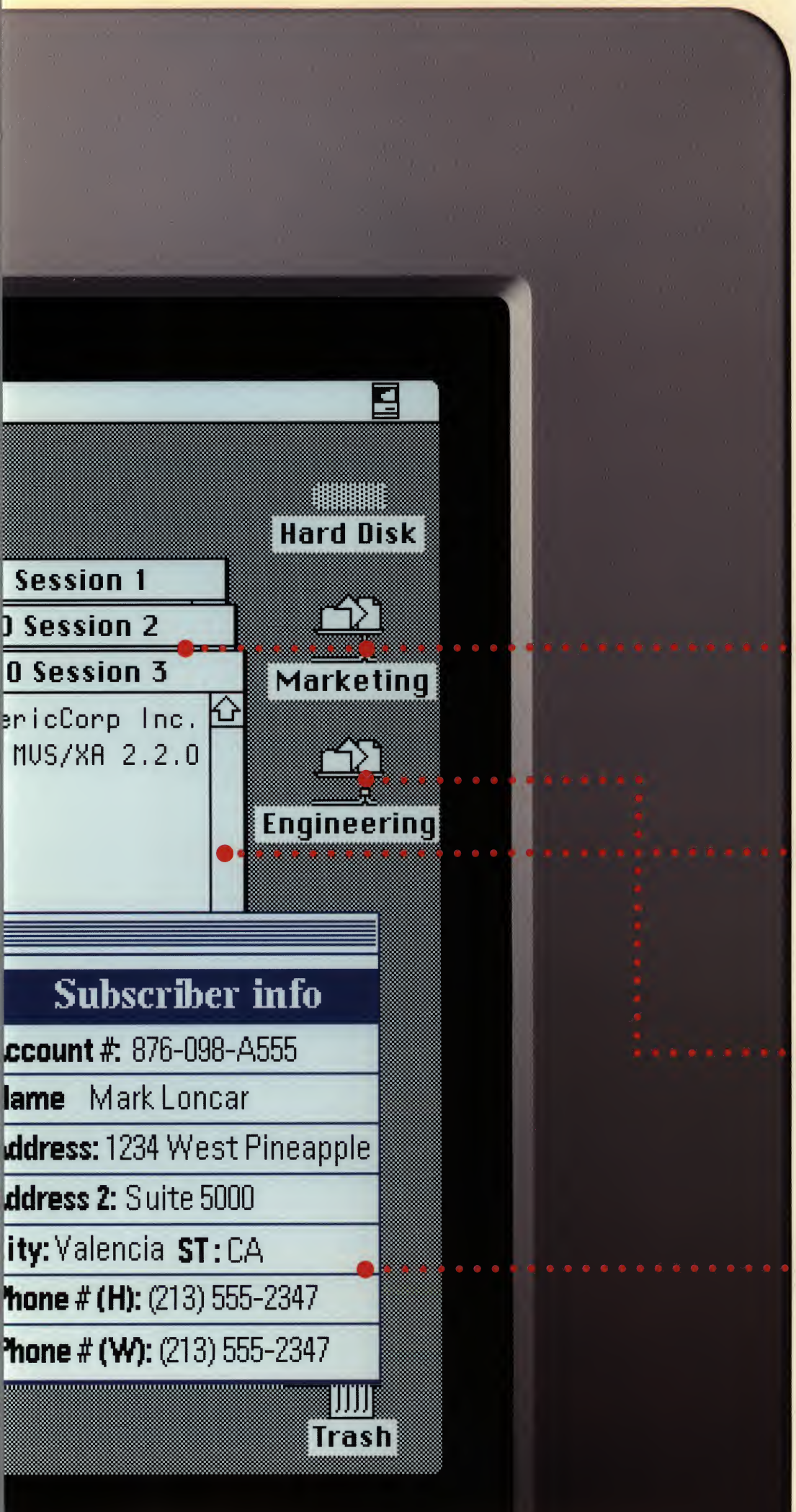
As these products become integrated into the environments for which they were designed, they will enhance the way people work—individually and collectively. Because information that is available to them will appear when they need it, in the form that best suits their purpose.

And all they'll have to do, in classic Macintosh style, is point and click.

Because, when you get right down to it, getting the information you want—in a way you can use and understand—is all that really matters.



Today it's possible to develop applications that can take the data you work with every day and turn it into meaningful information that you can use in a variety of ways. Information can be integrated from a range of sources and displayed on any Macintosh computer.



What you ne

Every Apple Macintosh computer has the "plug and play" capabilities provided by the AppleTalk® network system. This allows Macintosh computers to be used in any environment, from a small departmental workgroup to a high-performance, facilitywide internet.

Today there are more than 2 million AppleTalk nodes in use, making it one of the most widely installed network systems. And because the AppleTalk network system was designed in accordance with the same principles that Macintosh is based on, it's easy for organizations to install and support.

Apple TokenTalk NB Card
The Apple TokenTalk NB Card works with any of the computers in the Macintosh II family of systems; it allows

Apple Coax/Twinax Card
The Apple Coax/Twinax Card allows computers in the Macintosh II family of systems to be connected to an IBM

Apple EtherTalk NB Card
The Apple EtherTalk NB Card provides computers in the Macintosh II family of systems with direct connectivity to

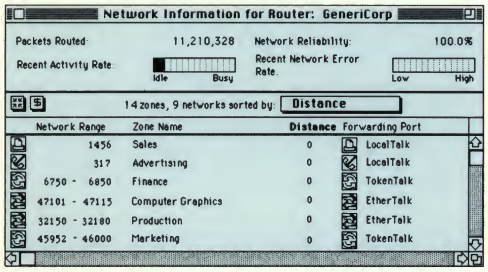
Apple Serial NB Card
For computers in the Macintosh II family of systems, the Apple Serial NB Card provides flexible communications

One of the innovative features shared by the Apple Coax/T which combines an on-board 68000 microprocessor, mem of communications protocols, freeing the main Macintosh

ed to get the information you need.

AppleTalk offers two advantages that make it unique among network systems: It's easy to use, and you can easily build a flexible, powerful networking environment with it.

Because AppleTalk is a complete network system that offers the flexibility to choose the type of network that best suits your application. In fact, our latest version of AppleTalk, AppleTalk Phase 2, can run over LocalTalk™ cabling, as well as Token-Ring and Ethernet networks. And it will deliver the highest level of performance that the selected network can support.



The AppleTalk Internet Router allows you to improve the performance and manageability of an AppleTalk network system. It can be used to interconnect LocalTalk, TokenTalk,™ and EtherTalk™ networks to form an internet. Which means that users can share files and printers, and send and receive mail, across the internet in the same way that they access those resources on a single network.

In addition to Macintosh systems, AppleTalk supports a variety of other environments, including Digital VMS,™ UNIX, MS-DOS, and Novell NetWare.

But what hasn't gotten lost, in the flurry of acronyms that characterize the world of communications, is the underlying idea that networking doesn't have to be a lot of work.

In fact, when it comes to getting your network to work the way you expect it to, AppleTalk may be all your computers need to know.

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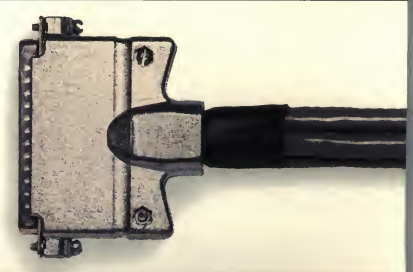
them to connect to IBM and other IEEE 802.5–compatible Token-Ring networks. And because the card supports a variety of network protocols (including AppleTalk, 3270, LU 6.2, and SMB), it can be used to access local area network services and mainframe-based services. The TokenTalk NB Card includes TokenTalk software, which implements AppleTalk support for AppleTalk Phase 2 networks and brings AppleTalk services (such as access to LaserWriter® printers and AppleShare® file servers) to Macintosh computers connected in a Token-Ring network. The card can also be used with MacDFT software to access mainframe-based applications and data, as well as with the Macintosh SMB File Transfer Utility to transfer files to and from an IBM PC LAN server on the network.

SNA network as 3270 Information Display Systems using industry-standard coax cabling. This capability allows users to access mainframe-based applications and data from a window on the Macintosh screen just as they would from a standard terminal. When used with MacDFT™ software, the Apple Coax/Twinax Card can support single-session Control Unit Terminal (CUT) emulation or up to five-session Distributed Function Terminal (DFT) 3270 emulation. Data can be transferred to and from mainframes (running VM/CMS or MVS/TSO) using the IBM IND$FILE package, as well as through the Macintosh Clipboard via standard "copy" and "paste" operations. And MacDFT can be used to assign function keys on the Macintosh keyboard to functions in 3270 applications.

802.3 Ethernet networks (it can be used either with thin coaxial cable, or with thick coaxial or twisted-pair cable using external transceivers). And it allows connected Macintosh systems to be used with a variety of networking protocols, including AppleTalk and TCP/IP. Included with the Apple EtherTalk NB Card is EtherTalk software, which implements AppleTalk support for AppleTalk Phase 2 networks and allows Macintosh users on the network to access network services (printers, file servers, and other resources). The card also works with MacX™ software, a display server that supports the X Window protocol and runs in a window on the Macintosh desktop.

options. It comes with four serial ports that can be configured for use as RS-232, RS-422, X.21, or V.35 communications ports. And when it is used with MacAPPC™ software, the Apple Serial NB Card provides SDLC connectivity to SNA environments. MacAPPC gives programmers the necessary software tools to write applications that support distributed communications services between Macintosh and LU 6.2–based systems connected to an SNA network. But more important, it provides them with the tools they need to give people access to mainframes via the Chooser, the standard Macintosh interface for selecting file servers, printers, and other resources. The Apple Serial NB Card is also the platform for the MacX25™ server, which gives users on an AppleTalk network transparent access to host services over X.25 packet-switched data networks.



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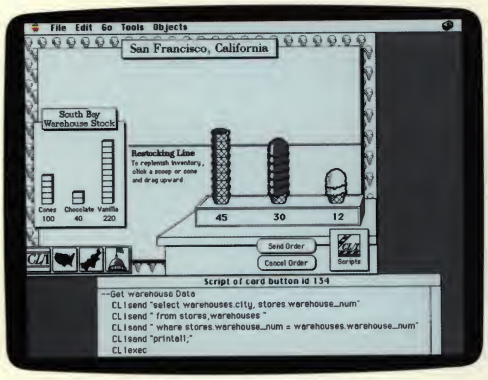
winax Card, the Apple TokenTalk NB Card, and the Apple Serial NB Card is the Macintosh Coprocessor Platform,™ ory, and an operating system. For these NuBus™ cards, this "intelligent" design supports the independent execution ll processor from those tasks and allowing it to concentrate on other applications.

Why you should get in on our latest developments.

In any networking environment, the most important connection that must be made is the connection between the individual and his or her computer.

And in keeping with the tradition



CL/1

of Macintosh, we're offering tools that developers can use to customize their applications, giving them the look and feel that has come to characterize Macintosh applications.

For example, there's CL/1™ a complete connectivity language based on the client/server model. CL/1 gives developers the ability to build applications that provide transparent access to multivendor SQL database management systems in the IBM and Digital environments.

We also offer MacWorkStation™ software, a development tool that allows programmers to modify host applications so that when they are run from a Macintosh, the applications present a graphical interface to the user. MacWorkStation gives developers access to menus, dialog boxes, and other

MacWorkStation

features that are characteristic of the Macintosh interface.

For developers who need to use lower-level communications functions, we offer application and system programming interfaces for AppleTalk, 3270, APPC, X.25, and TCP/IP. These interfaces allow developers to write special-purpose programs that take advantage of the strengths of the underlying network connections.

Finally, to facilitate the development of consistent Macintosh communications applications, we offer the Macintosh Communications Toolbox, an extension of the system software

Communications Toolbox

that provides standard access to data connections, terminal emulators, and file transfer protocols.

These products are just a sample of the kind of tools we're offering to developers—tools that enable them to help Macintosh users better understand and make use of the increasing volume of information that's available today.

And that just might be the most significant development of all.

How to get what's coming to you.

Just a few short years ago, AppleTalk made networking Macintosh computers a snap. Literally.

It was powerful. And it was easy.

Today, not much has changed—except for the number of ways in which Macintosh and AppleTalk can help you when it comes to making the right connection.

To find out how well connected Macintosh can be, contact an authorized Apple reseller or representative to arrange for a presentation or demonstration of the products described in this brochure.

And see for yourself what the world of networking and communications is coming to.

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